

Guide to School Gardens In Wyoming



WHO WE ARE

Wyoming Farm to Plate website

www.wyfarm2plate.org

Wyoming Department of Agriculture

Website: <http://agriculture.wy.gov/>

Ted Craig, Grants Program Manager

Wyoming Department of Agriculture

Phone: 307-777-6651

ted.craig@wyo.gov

Wyoming Department of Education

Wyoming Department of Education Farm to School

Website: http://edu.wyoming.gov/Programs/nutrition/Farm_to_School.aspx

Susan Benning, Accountant

Wyoming Department of Education

Phone: 307-777-6280

susan.benning@wyo.gov

Brook Brockman, Training & Grants Coordinator

Wyoming Department of Education

Phone: 307-777-2579

brook.brockman1@wyo.gov



The U.S. Department of Agriculture prohibits discrimination against its customers, employees, and applicants for employment on the bases of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866)632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov.

Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339; or (800) 845-6136 (Spanish).

USDA is an equal opportunity provider and employer.

Published January 2014

Table of Contents

Why School Gardens	4
Getting Started.....	4
Planning Your Outdoor Classroom	5
Policy	5
Screening and Liability	6
Using Garden Produce in the School	6
Fundraising	6
School Food Service and School Gardens.....	7
Allergies and Garden Activities.	7
Selecting the Site.....	8
Food Safety	8
Food Safety Resources.....	9
Pesticides, Herbicides, and Fertilizer Use.....	9
Water Safety.....	9
Harvesting.....	10
The Tools	11
Using School Garden Produce in your School Meal Program	12
Using School Garden Produce in your Fresh Fruit and Vegetable Program.....	12
Fresh produce Safety for School	13
A Few Resources	14



Get Started: Creating School Gardens as Outdoor Classrooms

Why School Gardens?

Wyoming recognizes that schools with a healthy nutrition environment can foster and improve student health. School gardens are recognized as a way to support this healthy environment.

A school garden puts the natural world at students' fingertips. This living laboratory—whether a planter box, an outdoor garden, or an indoor growing area—offers a rich context for exploring science, nutrition, social studies, math, art, language arts, and more.

School gardens are encouraged by the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS). School Food Authorities (SFA) can purchase produce from school gardens or accept donations. Additionally, any SFA school garden plan, any statement of support, and/or garden to cafeteria guidelines can be made a part of any **SFA Wellness Policy**.

There are many types of plants that can be grown in a garden including those that produce edible fruits and vegetables. The following tips will help you get started with your own project.

Getting Started

School gardens thrive everywhere—in both cold and warm climates, and in urban, suburban, and rural communities. School gardens exist in schools with no bare ground and in schools with acres of land. All of these schools have adapted strategies that work for them, tailoring gardens to fit their school's needs.

School gardens are effective learning tools that create opportunities for our children to discover fresh food, make healthier food choices and become better nourished. Gardens also offer dynamic, beautiful settings in which to integrate every discipline, including science, math, reading, environmental studies, nutrition and health. There are many types of plants that can be grown in a garden including those that produce edible fruits and vegetables.

Don't forget: School orchards look beautiful, and may be easier to maintain than school gardens or may be a great addition to a school garden and school grounds.





Remember: School gardens can take various forms and do not have to follow any one set pattern to be successful!

Planning Your Outdoor Classroom

Dream big, but start with a plan that is manageable for your school.

Your first step should be to create a garden plan that works for your school, your teachers, and your students. With the support of your school community, you can take the next step—planning for the future. What do you want your outdoor classroom to look like? Let a vision guide you in making reasonable, attainable goals. And remember, bigger is not necessarily better. Consider the purpose of the garden: Is it to teach science, or social studies, or math, or another discipline? Many schools have taught all these disciplines successfully by using indoor container gardens, planter boxes, rooftop gardens, and patio plots.

Just remember that the purpose should be defined. **Why do we want or have a school garden?**

School gardens involve growing fresh food on school grounds with students of all ages; therefore, there may be different policies that have to be considered for a school garden project.



Policy

- ✗ What are the relevant school district, city, and/or county policies concerning school gardens?
- ✗ Are there policies?
- ✗ What are the policies for growing and harvesting food?

There may be different levels of policies that effect school gardens. Does the Facilities and Grounds Department have policies on safe use of school grounds and the types of materials in a garden? Does Facilities have to check the garden to see if it meets the American Disability Act (ADA) standards for access to all students? What level will the Food and Nutrition Services Department be involved? Will they need to verify that safe food handling protocols are being used for fresh produce from the garden?

Screening and Liability

Will the school be utilizing volunteers for the school garden? What are the policies and issues for screening volunteers and background checks? What other liability issues may arise from a school garden (volunteer injuries)? Are these addressed in your district's or school's Risk Management Plan? Are there policies concerning volunteers in schools that define what kind of activities they are involved in with students and in gardens?

Using Garden Produce in the School

For Food Service?
For Snacks?
For Classroom Lessons?
All of the Above?

What will happen to the harvest? Can the students eat it in the classrooms for a snack? Can the harvest be given to the kitchen staff and be prepared for school lunch? Do you want to send some home with the students? Do you plan to sell some at a farmers' market to make money for the garden program? Do you want to donate a portion to a local non-profit agency?

Have a resolution for potential conflicts with the kitchen staff, school kitchen facilities, or any prep issues with food service.

Partner with food and consumer science teachers or students to use classroom sinks, kitchens, and food storage areas. However, always be mindful of food handling, safety, and proper storage.



Fundraising

- Will we need to fundraise for a garden?
- Will we need to have donations?
- Grants?
- Support from local businesses?
- Support from Food Service, PTO?

Long-Term Sustainability of the Garden

Once a garden has been built and is in production, the financial needs are not as high. Will there be funds available to sustain this activity or will steady donations and fundraising need to continue? **Eventually, the school garden program can or should become self-sustaining or even be a profit center that could support the development of larger projects or other gardens.**

School Food Service and School Gardens



SFA funds from the nonprofit school food service (SFS) account can be used to make purchases for a school garden (seeds, fertilizer, watering cans) with the understanding that the garden is used within the context of the school nutrition program. However, Fresh Fruit and Vegetable Programs (FFVP) funds cannot be used for the purchase of any materials (seeds, tools, etc.) for school gardens.

Schools can serve garden produce as part of a reimbursable meal or sell it a la carte, sell to parents, or to Parent Teacher Association members. However, the SFA is allowed to sell food grown in the school garden funded with SFA funds as long as the revenue accrues back to the SFS account.

The SFA can purchase produce from other school organizations that maintain and manage gardens, such as FFA.

It is important to ensure that safe growing principles are used to grow produce from any source, including gardens. Before using any produce from a school garden, visit the garden and ask about the growing practices.

Allergies and Garden Activities

The gardens are not all the same and neither are the gardeners. Some gardeners have food allergies, which are considered to be a major food safety issue. It's a good rule overall to not bring any products with allergens in the garden to prevent cross contamination.



Keep activities with foods like peanut butter out of the garden. To be even safer and respectful of the fellow gardeners, do not grow crops of well-known allergens, such as peanuts or soybeans.

Select non-allergenic and non-toxic plants. Check with your local Cooperative Extension office if you need assistance determining plant safety or toxicity.

Selecting the Site-

The following must be considered.

Sunlight

Location

Water

Accessibility

Visibility

Security

If possible, locate your garden within sight of classrooms and neighbors.
Make sure gardens don't obstruct visibility and hide intruders. Create reasonable barriers to keep wild animals away from the garden.

Food Safety

All SFAs must have an implemented food safety program for the preparation and service of school meals served to children. The program must be based on HACCP (Hazard Analysis and Critical Control Point) principles and conform to guidance issued by the USDA.



If any garden produce is used in any of the USDA Food Programs the garden must be included in the SFA's HACCP plan.

See the attached Best Practices: Handling Fresh Produce in Schools.

There are health and safety issues involved with school gardens, therefore, the SFA needs to familiarize themselves with the Federal, State, and local requirements and policies regarding health and sanitation issues.

Special care should be taken with regard to food safety when it comes to children. They are more susceptible to food borne illness than healthy adults as their immune systems are still developing.

Food Safety Resources

- ❖ “Wyoming Food, Drug and Cosmetic Safety Act” 35-7-109 through 35-7-127: <http://legisweb.state.wy.us/statutes/statutes.aspx?file=titles/Title35/T35CH7.htm>
- ❖ Wyoming Food Safety Rule, Chapter 3, Section 40 Washing Fruits and Vegetables. <http://wyagric.state.wy.us/divisions/chs/food-safety>
- ❖ Oregon Department of Education School Garden Food Safety Training & Documentation Manual: <http://www.ode.state.or.us/search/page/?id=2647>

Food Safety in the Garden:

There are three topics to think about as you design your safety procedures.

- Safe soil
- Safe water
- Food Safety
 - 🧼 Clean and sanitized hands - Harvesting
 - 🧼 Clean and sanitized surfaces.



Pesticides, Herbicides, and Fertilizer Use

School gardens usually practice pesticide-free methods (organic) of gardening. USDA recommends that all schools **do not use any pesticides or herbicides due to potential health hazards to children.**

Water Safety

By ensuring the use of safe water for irrigation, the potential of microbial contamination of fruits and vegetables is reduced.

Know the water source. Most public water systems provided by cities or other municipalities should be safe, but testing facilities can give the best information on what is coming out of the spigot.

Uncontaminated water ensures a good quality harvest.

If you wouldn't drink the water, don't apply it to your edible plants!





Harvesting

Growing and Harvesting Produce

A school garden provides an opportunity for children and volunteers to learn about how to handle food safely. The following are some food safety tips to follow when growing and harvesting produce.

- 🍏 Ensure that all persons, including staff, students, and volunteers receive basic food and gardening safety training instructions according to local health regulations.
- 🍏 Hand washing and personal hygiene.
- 🍏 Cleaning and sanitizing garden equipment and containers used to hold produce.
- 🍏 Handling produce during harvest, washing, and transportation.
- 🍏 Glove use.
- 🍏 Ensure that volunteers are covered by the school district insurance policy in the event of accident or injury.
- 🍏 Require signed permission slips for all student gardeners. Permission slips should list potential hazards of working in a school garden and identify any allergies the child may have.
- 🍏 Do not allow anyone to work in the garden while sick, or until 24 hours after symptoms, such as vomiting or diarrhea, have subsided.
- 🍏 Ensure that all harvesters wash hands thoroughly in warm, soapy water for at least 10 to 15 seconds, and then rinse with potable water. Ensure that all open cuts or wounds on hands, arms, or legs are properly covered prior to participating in the harvest.
- 🍏 Require harvesters to wear closed-toed shoes to prevent cuts, stings, or other injuries.
- 🍏 Consider using single-use disposable gloves when harvesting, or handling, fresh produce as an extra precaution.
- 🍏 Harvest the garden regularly and remove any rotten produce.
- 🍏 Use cleaned and sanitized food grade containers, such as plastic bins or buckets, to hold harvested produce. Do not use garbage bags, garbage cans, and any container that originally held chemicals. These types of containers are made from materials that are not intended for food use.
- 🍏 Clean harvesting tools, such as knives, scissors, etc., with soap and potable water immediately before and after each gardening session.

The Tools

- 🪴 While many gardeners just use their hands for harvesting, some use scissors, knives and other tools to remove fruits and vegetables from plants. If there happens to be a pathogen on the crops and the tools go unwashed, it will likely be passed onto the next vegetable it touches.
- 🪴 Clean tools and containers should be stored in a place where animals cannot get to them such as a locked shed.
- 🪴 The containers for the harvest should be regularly washed and sanitized. Use containers that will not cross-contaminate the fruits and vegetables. Do not re-use plastic bags or harvest into wooden boxes or unwashed buckets. The containers should be protected while in storage so that they cannot be contaminated in-between uses.
- 🪴 Clean off as much dirt and debris as possible while still in the field, so as to reduce the risk inside.
- 🪴 For immediate consumption: In school gardens, it is very common to eat fruits and vegetables right after they are harvested. However, all harvest should be washed and/or processed in a space with a clean and sanitized work surface, utensils, and hands.
- 🪴 The lowest risk “best practice” in terms of contamination is not to wash the harvest until it is time to be consumed. The harvest should be stored in a cool, pest-free area in separate containers (or new plastic bags) for each crop, away from any chemicals. However, it must be washed before eating.



Remember



CLEAN HANDS.
CLEAN WATER.
CLEAN SOIL.
CLEAN SURFACES.



Using School Garden Produce in your School Meal Program

- 🥕 If the harvest from the school garden will be used in the school meals program, work cooperatively with the school nutrition director to plan and implement the garden.
- 🥕 Accept produce harvested from school gardens only when school nutrition staff is present to receive it. All produce dropped off or left when staff is not present should not be used in the school meal programs.
- 🥕 Reject produce that does not meet school nutrition program standards.
- 🥕 Receive and inspect produce harvested from school gardens according to the same procedures used to inspect produce from the district's distributors.
- 🥕 Do not use any produce that has been noticeably contaminated by animals or insects.
- 🥕 Refrigerate garden produce immediately, unless the particular item is normally held at room temperature.
- 🥕 Store, prepare, and serve school garden produce separately from other sources of produce to maintain **traceability**.
- 🥕 Ensure that liability for a potential food borne illness caused by produce grown in school gardens is covered by your school district.



Using School Garden Produce in your Fresh Fruit and Vegetable Program (FFVP)

The FFVP is an effective and creative way of introducing fresh fruits and vegetables to elementary school children. The goal of the FFVP is to create healthier school environments by providing:

- 🍌 Healthier food choices.
- 🍌 Expand the variety of fruits and vegetables children experience.
- 🍌 Increase children's fruit and vegetable consumption.
- 🍌 Make a difference in children's diets to impact their present and future health.

Fresh Fruit and Vegetable Program funds cannot be used for the purchase of any materials (seeds, tools, etc.) for school gardens. However, schools can purchase from their own school garden or other school gardens using FFVP funds.

While the FFVP is all about establishing partnerships and nutrition education, the FFVP cannot be part of summer school sessions or served to other than elementary school children. School gardens may be able to fill in for these

program limitations, keeping in mind, that FFVP funds are to be used for the FFVP only and other funding would have to be used.

Fresh Produce Safety for Schools

Train everyone who prepares or serves food on how to properly wash and store fresh fruits and vegetables.

Receiving

Have established procedures for receiving and storing fresh produce.

Check produce for freshness by randomly examining the entire contents of a box rather than just the items on the top. If a product does not meet your standards of freshness, refuse to accept it.

Accept only produce that is not bruised or damaged.

Clean Produce

Wash all fresh fruits and vegetables thoroughly with cold running water—never in standing water—before serving.

Scrub firm produce, such as melons and cucumbers, with a clean produce brush.

Clean Equipment and Hands

Wash, rinse, sanitize, and air dry all food-contact surfaces, equipment, and utensils including cutting boards, knives, countertops, and sinks before and after use.

Wash hands thoroughly for at least 20 seconds with soap and warm running water before and after handling fresh produce.

Storage

Separate fresh produce from other refrigerated foods in refrigeration units. Cover and store washed cut produce above unwashed, uncut fresh produce. Store all produce off the floor.

Mark each item with the date it was received and practice First-In, First-Out inventory management methods.

Discard wilted or discolored products immediately.

Always store cut fruits and vegetables in the refrigerator. Refrigerate cut melons immediately.

A Few Resources

Attachments:

- ❖ SP-32-2009 USDA Memo School Garden Q & A
- ❖ Best Practices: Handling Fresh Produce in Schools
- ❖ Food Safety Tips for School Gardens

Slow Food USA: <http://www.slowfoodusa.org/#>

Toolkit: Food Safety in School Gardens: <http://www.farmtotablenm.org/>

Best Practices: Handling Fresh Produce in Schools:
<http://www.nfsmi.org/documentlibraryfiles/pdf/20100414060724.pdf>

The Edible Schoolyard Project: <http://edibleschoolyard.org/>

FNS School Gardens and Garden Curriculum:
<http://www.fns.usda.gov/farmtoschool/school-gardens-and-garden-curriculum>

Farm to School and School Gardening: A Resource List for Educators:
<http://pubs.nal.usda.gov/farm-school-and-school-gardening-resource-list-educators>

My Garden School Meals Resource, Michigan Department of Education:
http://www.michigan.gov/documents/mde/My_Garden_FSM_master_copyfinal_313190_7.pdf

Food Safety Tips for School Gardens:
<http://nfsmi.org/documentlibraryfiles/PDF/20110822025700.pdf>

Oregon Department of Education School Garden page:
<http://www.ode.state.or.us/search/page/?id=2647>

Kids Gardening (The National Gardening Association): <http://www.kidsgardening.org/>

Many, many more! With just a little research you will find many school garden resources from all over the United States.

